

WHAT IS CLAIMED IS:

1. A method for encoding a transition in an MPEG bitstream sequence including anchor pictures and bidirectionally predicted (B) pictures, said method comprising the steps of:

- a) coding first and second anchor pictures; and
- b) coding a transition in the sequence by inserting B pictures into the bitstream to create the transition from the first anchor picture to the second anchor picture.

2. The method as claimed in claim 1 wherein the pictures are comprised of macroblocks and wherein the insertion of the B pictures into the bitstream to create the transition from the first anchor picture to the second anchor picture comprises starting with a B picture in which most of the macroblocks are predicted from the first anchor picture and ending with a B picture in which most of the macroblocks are predicted from the second anchor picture.

3. The method as claimed in claim 1 wherein the pictures are comprised of macroblocks and wherein the insertion of the B pictures into the bitstream to create the transition from the first anchor picture to the second anchor picture comprises switching a number of macroblocks in each of the B pictures from being forward predicted to being backward predicted.

4. The method as claimed in claim 3 wherein the insertion of the B pictures into the bitstream to create the transition from the first anchor picture to the second anchor picture comprises randomly switching a predetermined number of macroblocks in each of the B pictures from being forward predicted to being backward predicted.

5. The method claimed in claim 1, where the first and second anchor pictures in step a) correspond to a last anchor picture in a first video sequence and a first anchor picture in a second video sequence.

6. The method claimed in claim 5, where the video sequences comprise a group of still images.

7. The method claimed in claim 1, where the B pictures in step b) comprise macroblocks that are forward predicted, backward predicted, or interpolated.

8. The method claimed in claim 7, where none of the macroblocks contain DCT coefficients.

9. The method claimed in claim 7, where each of the macroblocks contain motion vectors that are (0,0).

10. A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 1.

11. A method for encoding a transition in an MPEG bitstream sequence including anchor pictures and predicted (P) pictures, said method comprising the steps of:

- a) coding a first anchor picture; and
- b) coding a transition by inserting P pictures into the bitstream to create the transition from the first anchor picture to a second anchor picture.

12. The method claimed in claim 11, where the first and second anchor pictures correspond to a last anchor picture in a first video sequence and a first anchor picture in a second video sequence.

13. The method claimed in claim 12, where the video sequences comprise a group of still images.

14. The method claimed in claim 11, wherein the pictures are comprised of macroblocks that are either intra coded or predicted and wherein the second anchor picture is replaced with a P picture with the majority of the macroblocks replaced by macroblocks predicted from the previous P picture in the transition.

15. The method claimed in claim 11, wherein the pictures are comprised of macroblocks that are either intra coded or predicted and where the inserted P pictures comprise macroblocks predicted from either the first anchor picture or a previous inserted P picture and intra coded macroblocks copied from the second anchor picture.

16. The method claimed in claim 11, wherein the pictures are comprised of macroblocks that are either intra coded or predicted and wherein the predicted macroblocks contain motion vectors that are comprised of horizontal and vertical components that are integer multiples of 16.

17. A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 11.

18. A method for encoding a transition in an MPEG bitstream sequence including anchor pictures, bidirectionally predicted (B) and predicted (P) pictures, said method comprising the steps of:

a) coding a first anchor picture; and

b) coding a transition by inserting B and P pictures into the bitstream to create the transition from the first anchor picture to a second anchor picture

19. The method claimed in claim 18, where the first and second anchor pictures correspond to a last anchor picture in a first video sequence and a first anchor picture in a second video sequence.

20. The method claimed in claim 19, where the video sequences comprise a group of still images.

21. The method claimed in claim 18, wherein the pictures are comprised of macroblocks that are either intra coded or predicted and where the inserted P pictures comprise macroblocks predicted from either the first anchor picture or a previous inserted P picture and intra coded macroblocks copied from the second anchor picture.

22. The method claimed in claim 18, where the inserted B pictures comprise macroblocks that are forward predicted, backward predicted, or interpolated.

23. The method claimed in claim 18, wherein the pictures are comprised of macroblocks that are either intra coded or predicted and where the macroblocks that are not intra coded contain motion vectors comprised of horizontal and vertical components that are integer multiples of 16.

24. A computer storage medium having instructions stored therein for causing a computer to perform the method of claim 18.